

What's New in ZoneFlex Software Release 9.1

This application note describes the new features available in Version 9.1 of the Ruckus Wireless ZoneFlex family. This document assumes familiarity with the Ruckus ZoneFlex product line and the features of earlier releases including version 9.0.

Highlights of this Release

ZoneFlex software release 9.1 provides Enterprises, HotZone Operators and Managed Service Providers a higher performing, more reliable, and easier to deploy and use way of providing wireless access to diverse groups of users across multiple locations:

- ZoneFlex 7762-S 802.11n Dual-band Outdoor Access Point with Sector Antenna
- ZoneFlex 7025 802.11n Wired/Wireless Wall Switch
- ZoneDirector 1100
- Ethernet enhancements
 - Port-based VLANs
 - Port disablement
- SSIDs with Multiple Configurations
- Dynamic PSK™ and Zero-IT for Apple iPad and Android OS platforms
- SNMPv3
- External Antenna configuration
- RADIUS Accounting enhancements
- FlexMaster enhancements

Supported Platforms

- FlexMaster version 9.1
 - ZoneDirector 1000 Smart/OS version 9.1
 - ZoneDirector 1100 Smart/OS version 9.1
 - ZoneDirector 3000 Smart/OS version 9.1
 - ZoneFlex 2942 802.11g Access Point version 9.1
 - ZoneFlex 7025 802.11n Wired/Wireless Wall Switch version 9.1
 - ZoneFlex 7343 802.11n Access Point version 9.1
 - ZoneFlex 7363 802.11n Dual-band Access Point version 9.1
 - ZoneFlex 7942 802.11n Access Point version 9.1
 - ZoneFlex 7962 802.11n Dual-band Access Point version 9.1
 - ZoneFlex 2741 802.11g Outdoor Access Point version 9.1
 - ZoneFlex 7762 802.11n Dual-band Outdoor Access Point version 9.1
 - ZoneFlex 7762-S 802.11n Dual-band Outdoor Access Point with Sector Antenna version 9.1
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1. Introduction to Ruckus Wireless ZoneFlex 7762-S 802.11n Dual-band Outdoor AP with Sector Antenna

The Ruckus Wireless ZoneFlex 7762-S is the first high-speed, dual-band 802.11n Smart Wi-Fi outdoor access point that integrates a dual-polarized, sectorized, smart antenna array and is capable of delivering 600 Mbps of throughput, up to 10dBi of signal gain and 15dB of interference rejection within a 120° beam width. This provides for much longer range signals, better signal penetration into buildings and more resilient mesh connections that adapt to interference and changing environmental conditions.

Supporting advanced Smart Mesh Networking, the ZoneFlex 7762-S is perfect for providers looking to quickly and economically expand branded broadband services, offload data traffic from congested 3G networks, deploy multimedia hotspots or offer wireless broadband services where fixed line access is limited. Separate radios for access and backhaul traffic deliver high-throughput to clients.

IP-67 rated, the ZoneFlex 7762-S can be deployed as a standalone AP or as part of a unified wireless system managed by the Ruckus ZoneDirector WLAN controller or FlexMaster Wi-Fi management system. When used with a high-power Ruckus PoE injector, the ZoneFlex 7762-S can power an adjacent device (e.g. surveillance camera) via standard PoE (802.3af).

Self-provisioning, self-organizing and self-healing, the ZoneFlex 7762-S mesh AP provides unprecedented deployment simplicity.

Customer Benefits

- Wire-like performance and reliability
- Ideal for high-density outdoor deployments
- Directional, high-gain antennas dynamically combine to deliver two- to four-times the coverage over typical outdoor APs
- Compact, lightweight design is easy to deploy and draws minimal attention
- Ideal for Service Providers looking to offload data from their congested 3G networks
- Distributed forwarding architecture eliminates controller bottlenecks with 802.11n APs
- Standard 802.3af support for painless migration leveraging existing PoE switches
- Unified indoor/outdoor WLAN has never been simpler to deploy or manage

Availability

ZoneFlex 7762-S 802.11n Access Points with software release 9.1

2. Introduction to Ruckus Wireless ZoneFlex 7025 802.11n Wired/Wireless Wall Switch

The Ruckus Wireless ZoneFlex 7025 is the first Wi-Fi Wall Switch that integrates high speed 802.11n Wi-Fi technology with wired Ethernet ports into an elegant, inconspicuous and low-profile wall jack that fits into any standard United States or European electrical junction box.

Purposely developed to meet the growing demands within hotels to connect in-room devices that are now IP-enabled, the 7025 concurrently supports a broad range of IP-based services including high-speed Internet access (HSIA), high definition television and video on demand (VOD), digital advertising, voice communications, hotel service optimization, in-room device monitoring and even environmental room controls.

Ruckus Wi-Fi Wall Switch is driven by a single PoE connection and provides four 10/100 Mbps Ethernet jacks and two uplink Ethernet wiring options. Additionally, the Ruckus Wi-Fi Wall Switch uses PoE to power a device such as an IP phone and provides native connectivity to digital phones through a single digital PBX pass through port.

Deployed as a standalone device or centrally managed by Ruckus FlexMaster Wi-Fi management system or ZoneDirector 3000 or 1100 Series wireless LAN controller (ZoneFlex 7025 is not manageable by ZoneDirector 1000), the Ruckus Wi-Fi Wall Switch reduces the cost and complexity of installing and managing wired and wireless network services.

Customer Benefits

- Single device provides wired and 802.11n wireless access
- Supports concurrent IP-based services such as VoIP, IPTV, high-speed Internet access and in-room device connectivity
- Standard wall plate design, along with POE support, is inconspicuous and easy to install
- Eliminates unsightly cables and network devices within hotel guest rooms
- Plug and play for existing digital phones
- Ideal for hotels looking to converge their wired and wireless networks into a single infrastructure

Availability

ZoneFlex 7025 802.11n Wired/Wireless Wall Switch with software release 9.1

3. Introduction to Ruckus Wireless ZoneDirector 1100 controller

The Ruckus Wireless ZoneDirector 1100 is a Smart Wireless LAN Controller designed for small businesses and branch offices. Capable of managing 6, 12, 25 and 50 APs, the ZoneDirector 1100 has a very easy-to-use interface, provides guest access and hotspot services, and simplifies wireless deployment with automatic, self-optimizing radio management. Users can easily be enabled to use a secured network with Ruckus' patented Dynamic Pre-Shared Key and Zero-IT provisioning. With support for WPA/WPA2 802.1X security, L2-L4 ACLs, dynamic VLANs and Smart Redundancy, the ZoneDirector 1100 integrates seamlessly into existing enterprise architectures.

The ZoneDirector 1100's compact form factor makes it easy to deploy on a desktop, underneath counters, or in other limited spaces. With increased memory over the ZoneDirector 1000, the ZoneDirector 1100 is designed to support existing and future products and features.

Customer Benefits

- Simple to use, secure wireless networking with automatic radio management and Zero-IT provisioning
- Seamless integration with existing network infrastructure
- Scales as your WLAN grows
- Compact size takes up minimal space

Availability

ZoneDirector 1100 with software release 9.1

4. Ethernet Port Enhancements

With this release, Ruckus Wireless enhances manageability of the Ethernet ports of ZoneFlex APs.

4.1. Port-based VLANs

Administrators can assign the Ethernet ports of ZoneDirector-managed access points to VLANs. Ethernet ports of ZoneFlex APs can be configured as either an Access port or a Trunk port, and an Access port can be assigned a VLAN ID. Traffic from devices connected to Access ports identified with a VLAN ID is tagged with the VLAN ID when forwarded across the Trunk port.

4.2. Disabling Ethernet Ports

Administrator can disable the Ethernet ports of ZoneDirector-managed access points. This allows an administrator to prevent wired access through the unused Ethernet ports of mesh nodes.

Customer Benefits

- Seamless integration with existing network infrastructure
- Enhances security and network control

Availability

ZoneDirector with Smart/OS software release 9.1

5. SSID with Multiple Configurations

With this release, administrators can define different configurations for a single SSID. For instance, a WLAN defined with Open authentication can use the same SSID as a WLAN defined with 802.1X authentication. Alternatively, a WLAN configured with walled garden URLs specific for one location can use the same SSID as a WLAN configured with walled garden URLs specific to a different location. This allows network operators to market a single SSID to different user types or at different locations.

Customer Benefits

- Increases deployment flexibility
- Improves branding for Service Providers
- Enhances usability for subscribers customers

Availability

ZoneDirector with Smart/OS software release 9.1

6. Dynamic PSK™ and Zero-IT for Apple iPad and Android OS Platforms

Starting with software release 9.1, Ruckus Wireless extends its patent-pending Dynamic PSK and Zero-IT to support Apple iPad and Android OS platforms. Customers with iPad and Android machines can now automatically provision the wireless settings (SSID and unique pre-shared key) with Dynamic PSK, while Ruckus's Zero-IT capability can also be used to provision other wireless authentication and security parameters (e.g. configuring SSIDs, 802.1x, ...). Support for iPad and Android platforms is in addition to the previous support of Windows 7, Windows XP, Windows Vista, Windows Mobile, Windows CE, Apple Mac, and Apple iPhone.

Customer Benefits

- Highly secure and easy to deploy wireless for Apple iPad and Android OS machines

Availability

ZoneDirector with Smart/OS software release 9.1

7. SNMPv3

With this release, ZoneFlex Access Points and ZoneDirector can be managed using SNMPv3. With SNMPv3, an external, third-party network management system can establish a secure connection to ZoneDirector or ZoneFlex APs, ensuring that configuration changes and configuration or status information requests are kept private and only made by authorized network managers. Additionally, read-only and read-write roles allow tiered privileges to differentiate access levels.

Customer Benefits

- Enhances security
- Seamless integration with existing network infrastructure and network policies

Availability

ZoneFlex Access Points and ZoneDirector with Smart/OS software release 9.1

8. External Antenna Gain

With this release, administrators can indicate the gain of an antenna attached externally to ZoneFlex Access Points. The conducted transmit power of the AP is adjusted to maximize the Effective Isotropic Radiated Power (EIRP) allowed by regulations.

Customer Benefits

- Increased deployment flexibility
- Maximizes radio performance

Availability

ZoneFlex Access Points and ZoneDirector with Smart/OS software release 9.1

9. RADIUS Accounting

With this release, RADIUS Accounting can be enabled on WLANs with Open, Shared, and MAC Authentication, in addition to WLANs using 802.1X authentication. Additionally, Guest WLANs and WLANs enabled with Captive Portal services can be enabled with RADIUS accounting. RADIUS Accounting allows administrators to track client connections and data usage as they roam across the network.

Customer Benefits

- Enables billing services
- Enhances capacity planning and troubleshooting

Availability

ZoneDirector with Smart/OS software release 9.1

10. FlexMaster Enhancements

With this release, FlexMaster WebUI has been enhanced. FlexMaster provides the ability to sort drop-down boxes alphabetically, view more records in tables with large query results, search for devices with Firmware Task creation, and remember the zoom level for Google Maps (on Dashboard). GPS coordinates will automatically be populated from address input into Location field. Additionally, multiple ZoneDirector backups can be performed at the same time.

Customer Benefits

- Increased efficiency
- Less data entry
- Easier task creations

Availability

FlexMaster with software release 9.1